

What is claimed is:

1. A control system for a vehicle having a continuously variable transmission that includes a drive pulley connected to an internal combustion engine installed on the vehicle and having a variable effective diameter, a driven pulley connected to drive wheels of the vehicle and having a variable effective diameter, and a transmission belt stretched around the drive pulley and the driven pulley, and transfers power of the engine to the drive wheels while continuously variably changing a transmission ratio by changing at least one of the respective effective diameters of the drive pulley and the driven pulley, and a clutch of a friction type which is provided between the engine and the drive wheels,

the control system comprising:

transmission transfer torque-setting means for setting a transmission transfer torque to be transferred from the drive pulley to the driven pulley;

clutch transfer torque-setting means for setting a clutch transfer torque to be transferred by the clutch;

control means for controlling an engaging force of the clutch based on the clutch transfer torque set by said clutch transfer torque-setting means; and

bad road-determining means for determining whether or not the vehicle is traveling on a bad road,

wherein said clutch transfer torque-setting means reduces the clutch transfer torque such that slippage of the clutch is allowed, when it is determined by said bad road-determining means that the vehicle is traveling on a bad road, and

wherein said transmission transfer torque-setting means sets the transmission transfer torque to a larger value as the clutch transfer torque is larger, when it is determined that the vehicle is traveling on a bad road.

2. A control system as claimed in claim 1, wherein the vehicle includes an accelerator pedal, and the engine includes a throttle valve controlled according to a degree of opening of said accelerator pedal,

the control system further comprising:

throttle valve opening-detecting means for detecting the degree of opening of the throttle valve,

target transmission ratio-setting means for setting a target transmission ratio of the continuously variable transmission according to the detected degree of opening of the throttle valve,

transmission ratio control means for controlling a transmission ratio of the continuously variable transmission such that the transmission ratio becomes equal to the set target transmission ratio, and

throttle valve opening-correcting means for correcting the degree of opening of the throttle valve when it is determined that the vehicle is traveling on a bad road.

3. A control system for a vehicle having a continuously variable transmission that includes a drive pulley connected to an internal combustion engine installed on the vehicle and having a variable effective diameter, a driven pulley connected to drive wheels of the vehicle and having a variable effective diameter, and a transmission belt stretched around the drive pulley and the driven pulley, and transfers power

of the engine to the drive wheels while continuously variably changing a transmission ratio by changing at least one of the respective effective diameters of the drive pulley and the driven pulley, an oil pressure pump for supplying working oil pressure to the drive pulley and the driven pulley for changing the respective effective diameters thereof, and a clutch of a friction type which is provided between the engine and the drive wheels,

the control system comprising:

working oil pressure-setting means for setting the working oil pressure;

clutch transfer torque-setting means for setting a clutch transfer torque to be transferred by the clutch;

control means for controlling an engaging force of the clutch based on the clutch transfer torque set by said clutch transfer torque-setting means; and

output torque change amount-detecting means for detecting an amount of change in an output torque from the engine,

wherein said clutch transfer torque-setting means reduces the clutch transfer torque such that slippage of the clutch is allowed, when the amount of change in the output torque detected by said output torque change amount-detecting means is larger than a predetermined value, and

wherein said working oil pressure-setting means sets the working oil pressure to a higher value as the clutch transfer torque is larger, when the amount of change in the output torque is larger than the predetermined value.

4. A control system as claimed in claim 3,

further comprising clutch slippage degree-detecting means for detecting a degree of slippage of the clutch, and

wherein said clutch transfer torque-setting means reduces the clutch transfer torque, and thereafter progressively increases the clutch transfer torque depending on the detected degree of slippage of the clutch.